REMARKS

General

Claims 16 and 22 have been amended as suggested by the Examiner. Claim 18 has been amended to reflect appropriate antecedent. The status of all previous claims has been noted.

The Final Rejection was withdrawn and prosecution was reopened in view of the Response filed on April 24, 2003. The content of that response, which addressed US Patent 5,173,526 to Vijayendran, US Patent 4,756,844 to Walles et al, US Patent 6,436,540 B1 to Garcia and US Patent 5,948,735 to Newlove, is incorporated herein by reference. In the Final Rejection, Walles et al was employed as the primary reference and Vijayendran et al, Garcia et al and Newlove et al were employed as secondary references.

Applicants argued that Walles was not relevant as a primary reference and that it should be withdrawn. Walles is not employed as a primary reference in the present rejection. Walles, Vijayendran and Garcia are now employed as secondary references. Newlove is not relied on in the present rejection and has apparently been withdrawn. A new reference, US Patent 5,741,433 to Mitchell et al, is employed herein as the primary reference.

Art Rejections

The rejection of claims 16, 17 and 21 under 35 U.S.C. 103(a) as being obvious over Mitchell et al in view of Vijayendran et al is traversed for the following reasons.

Mitchell does not disclose or suggest "a polyurethane-vinyl polymer dispersion" and, accordingly, cannot logically suggest that a polyurethane-vinyl polymer dispersion is useful as a film former having controlled release properties. (Mitchell, col. 3, lines 43-45, col. 6, lines 1-5)

In contrast, Applicants claim a polyurethane-vinyl polymer dispersion as a membrane wall for a hollow capsule which contains a chemical composition. In the invention of Applicants, an aqueous liquid diffuses through the membrane wall to the interior of the capsule, dissolves the chemical composition to form a solution which then diffuses through the membrane wall to, thereby, release the composition from the interior of the capsule. Applicants discovered this property of the polyurethane-vinyl polymer dispersion and realized its utility as a membrane wall having controlled release properties. Mitchell did not make that discovery and made no suggestion of the utility.

Mitchell, in Table 2, discloses a variety of specific compositions including at least two which, "were not acceptable coating materials due to the sticky nature of the polymers" and two which, "were found to be non film formers." The two "sticky" polymers were vinyl polymers. One of the "non film formers" was a vinyl polymer. Table 2 of Mitchell also listed two polyurethanes, but no working example is provided, and no comment is made with regard to the utility of a polyurethane as a coating material.

Mitchell makes no suggestion that a combination of the sticky/non film former vinyl with the polyurethane would produce a satisfactory membrane. It is submitted that the factual data

actually provided by Mitchell teaches away from such a combination. It is reasonable to conclude that Mitchell does not suggest "a polyurethane-vinyl polymer dispersion" and not reasonable to conclude the contrary. The negative teaching of Mitchell is clearly indicated by the disclosed sticky nature and lack of utility of some vinyl polymers and the notable absence of any display of enthusiasm for polyurethane.

Mitchell stated, "Any type of coating material conventionally known in the art which provides controlled-release properties may be used in the present invention." (Col. 3, lines 43-45) In this regard, the composition disclosed and claimed by Vijayendran was known in the art on the date that Mitchell et al filed their application. However, there is no indication in Mitchell or Vijayendran that the composition of Vijayendran on that date was "conventionally known in the art" to be a coating material which provides controlled-release properties. Mitchell failed to recognize the utility and the Patent Office placed the two patents in two different technical classifications. It was left to Applicants to discover the utility of the composition disclosed by Vijayendran.

Vijayendran discloses a flexible surface made from a polyurethane-vinyl polymer dispersion which will protect a substrate such as paper, metals, plastics and wood from solvents, corrodants and abrasives. Inherent in this teaching is the requirement that water shall not pass through the surface to contact the substrate. Vijayendran does not teach the use of his composition as a membrane wall of a capsule.

What is resident in the disclosures of Mitchell and Vijayendran to suggest that a combination of the two would produce the invention claimed herein? Nothing. The teaching is contained in the disclosure of Applicants. That teaching cannot be employed by the Examiner in hind sight.

The rejection of claims 18, 20, 23, 34 and 35 under 35 U.S.C. 103(a) as being obvious over Mitchell et al and Vijayendran et al in view of Walles et al, and the rejection of claims 19, 22, 24-28 and 30 as being obvious over Mitchell, Vijayendran and Walles in view of Garcia et al are traversed for the above reasons and the following additional reasons.

Walles and Garcia are extensively discussed in the responses filed on April 24, 2003, and December 4, 2002. Those responses are specifically included herein by reference.

This application is in condition for allowance. Reconsideration and allowance is requested.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that the within and foregoing document, together with the attachments referred to therein, if any, is being deposited by the undersigned with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, Virginia 22213-1450 on the date written just below my signature.

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July 8, 2003
Date